A2 cont'd

The *Neisseria meningitidis* isolates for patients 1, 2, 3 were L1 (B nt pl.14), L3 (B15 p1.7) and L2 (C2a p1.5) respectively. One paired sera from patient 2 infected with a *Neisseria meningitidis* strain that was MAb B5 reactive demonstrated an increase in specific inner core LPS antibodies by ELISA between early and late infection (p=0.03 not significant two-tailed paired t-test, 95% CI 0.09-90.8)) (Figure 10a). Patient 1 sera demonstrated no significant difference in the titre of antibody taken early and later during IMD but the titre of the early sample was already at a high level (Figure 10a). The lack of increase may reflect higher affinity antibody in the convalescent sample that would not be detected in this ELISA. However in both patient 1 and 2 sera there was a nearly significant increase in functional activity in the convalescent sera in an opsonophagocytosis assay with L3 wild-type strain MC58 and human peripheral polymorphonuclear cells (p=0.06 two-tailed pared t-test, 95%CI 0.90-5.96) (Figure 10b) (Plested *et al.* 2000b). There was no significant increase in specific antibody titre between acute and convalescent sera taken from patient 3 infected with L2 immunotype strain (MAb B5 non-reactive) as measured by ELISA (Figure 10a). There was no significant functional activity in OP assay against L3 wild-type strain with sera taken from patient 3 early or later during IMD (Figure 10b). This demonstrates the clinical relevance of the MAb B5 epitope *in vivo* and that specific inner core LPS antibodies are functional *in vivo*.--

Paragraph beginning at page 56, line 1 has been amended as follows:

A3

--Figure 10a. ELISA titres of antibodies to L3 *galE* LPS (lgG) in paired sera taken early and late from children with invasive meningococcal disease.--

Paragraph beginning at page 56, line 3 has been amended as follows:

A4

--Figure 10b. Mean % phagocytosis of *Neisseria meningitidis* MC58 with paired sera taken early and late from children with invasive meningococcal disease with human peripheral blood mononuclear cells and human complement.--

In the claims:

Amend claims 4, 5, 9-14, 17, 19-22, 24-27, 35-37 and 41, as follows: